



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,173	07/03/2003	Craig D. Yarbrough	SVSN-26,380	9135

25883 7590 02/08/2007  
HOWISON & ARNOTT, L.L.P  
P.O. BOX 741715  
DALLAS, TX 75374-1715

EXAMINER
----------

BANGACHON, WILLIAM L

ART UNIT	PAPER NUMBER
----------	--------------

2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

88

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,173	<b>Applicant(s)</b> YARBROUGH, CRAIG D.	
	<b>Examiner</b> William L. Bangachon	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓           | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/29/2006 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed 12/29/2006 have been fully considered but they are not persuasive.

In response to applicant's argument [Remarks, page 6, 4<sup>th</sup> paragraph] that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **"the Bueno reference does not provide the ability to verify the user utilizing the on-board processor"**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims are broader than what applicant argues in that claim 1 does not recite a biometric system for verifying a user utilizing the on-board processor.

In response to applicant's argument that **"there is no verification transmitted in Bueno"**, applicant is directed to column 3, lines 10-12 of Bueno, which states "the result of the comparison (verification) together with the data of the card stored in memory 7 are transmitted by module 9 to the fixed station 1".

In response to applicant's argument that **"the card and reader of the Cudlitz reference are all one item and therefore does not disclose a concept of a separate passive card with the combination of a separate card holder"** recited in claims 4 and 7 [Remarks, page 7, 1<sup>st</sup> paragraph], the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, Bueno teaches the separate passive card with the combination of a separate card holder while Cudlitz is cited to teach of the biometric authentication wherein Cudlitz suggests that combining ID number and biometric characteristic of an individual is advantageous because it provides increased security and at the same time, expedite processing of smart cards passing through access gates {see Cudlitz, col. 1, lines 20-37; col. 2, lines 65-67}. Further, claims 4 and 7 are broader than what applicant argues. There is no indication in claims 4 and 7 of a separate passive card with the combination of a separate cardholder. Claims 4 and 7 recite "the remote identification tag holder of claim 1, further comprising a biometric data reader communicably connected to said transmitter. The biometric data reader is broadly interpreted as a biometric data reader

Art Unit: 2612

that communicates with the transmitter, wherein the communication can be in the form of wired or wireless communication.

In response to applicant's argument that **“the Cudlitz reference does not provide for transmitting the biometric data to a separate location for comparison with the actual data in order to do a verification”** [Remarks, page 8, 1<sup>st</sup> paragraph], the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, Bueno teaches the separate passive card with the combination of a separate card holder wherein the card holder transmits data to a separate location for comparison. Cudlitz is cited to teach of the biometric authentication wherein Cudlitz suggests that combining ID number and biometric characteristic of an individual is advantageous because it provides increased security and at the same time, expedite processing of smart cards passing through access gates {see Cudlitz, col. 1, lines 20-37; col. 2, lines 65-67}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include a biometric data of a user with the transmitted data of Bueno for verification purposes because, as taught by Cudlitz, it provides increased security and at the same time, expedite processing of smart cards passing through access gates.

Finally, applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2612

Based on the above observation, the rejection of claims 1-4 and 6-20 is maintained in this Office action.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2612

6. Claims 1, 3 and <sup>8,10</sup>~~8-10~~, are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,532,689 (hereinafter 'Bueno').

In claim 1, Bueno teaches of an identification tag component comprising:

an smart card housing (i.e. identification tag shell (4)) having an outer surface as shown in the drawing, a transmitter (9), an identification tag interface (6) communicably connected to said transmitter (9) and adapted to read fixed identification data (i.e. CCUI) from an identification tag (5) which was fixedly stored therein {see col. 2, lines 53-62+}; and

wherein said transmitter transmits identification data {see col. 3, lines 10-12}.

means on said outer surface (i.e. card-presence detecting contact) for holding the identification tag in communicable proximity to said identification tag interface {col. 3, lines 13-16};

a processor (8) for processing said read identification data and operable to validate the identification tag based on said read fixed identification data and generate a verification signal {see paragraph bridging cols. 2 and 3};

In claim 3, the remote identification tag holder of claim 1, wherein said identification tag interface is a smart card reader (memory interface) as shown in the drawings.

In claim 8, the identification tag component of claim 1, wherein said identification data (CCUI) is authorization data that prevents fraud {see col. 3, lines 13-18}.

In claim 10, the identification tag component of claim 1, wherein said identification data (CCUI) identifies equipment, such as a motor vehicle passing through the motorway toll station {see col. 2, lines 18-20}.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,532,689 (Bueno) in view of USP 5,310,999 (hereinafter 'Claus et al').

In claim 2, although Bueno do not disclose expressly **“said transmitter is an active transmitter”**, the claim limitation is a just a matter of obvious design choice as evidenced by Claus and would have been obvious in the system of Bueno because it is just a matter of adding a battery to the smart card 5 to make the transmitter active (9) {see Claus et al, col. 5, lines 63-66}. Active transmitters are usually used whenever a user wishes to have a longer transmission distance. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include an active transmitter in the system of Bueno because, as evidenced by Claus, it is just a matter of adding a battery to the smart card 5 to make the transmitter active (9), to thereby increase the transmission range of the transmitter of Bueno.

8. Claims 4, 6-7 and 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,532,689 (Bueno) in view of US H2120 (hereinafter 'Cudlitz').

In claims 4, 6-7 and 9, Bueno does not disclose **“a biometric data reader”**. However, Cudlitz, in an analogous art, teaches of “a biometric data reader 100 communicably connected to said transmitter 204 and processor 202, wherein said



Art Unit: 2612

processor 202 receives input biometric data from said biometric data reader 100 and said processor processes said input biometric data and wherein stored biometric data is stored on the identification card and said processor processes said stored biometric data and said processor determines if the input biometric data is substantially related to the stored biometric data and generates a biometric verification signal and wherein said transmitter transmits said biometric verification signal" {see Cudlitz, Figure 2, col. 3, lines 20+}. The systems of Bueno and Cudlitz are analogous art because they are from the same field of endeavor, wireless authentication of smart card systems. Cudlitz suggests that combining ID number and biometric characteristic of an individual (i.e. identifies a user) is advantageous because it provides increased security and at the same time, expedite processing of smart cards passing through access gates {see Cudlitz, col. 1, lines 20-37; col. 2, lines 65-67}. Obviously, it is beneficial in the system of Bueno, because Bueno is concerned with transmitting data quickly and securely from a smart card during a remote transaction. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to have a biometric authentication in the system of Bueno, because, as taught by Cudlitz, it provides increased security and at the same time, expedite processing of smart cards passing through access gates.

9. Claims 11-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,532,689 (Bueno) in view of US 6,219,439 (Burger), and further in view of USP 6,507,912 (hereinafter 'Matyas, Jr. et al').

Claim 11 recites the remote identification tag holder of claim 1, further comprising a location receiver (see Bueno, 2) receiving transmissions from said transmitter (see Bueno, 9), and a location processor (see Bueno, 3) connected to said location receiver (see Bueno, 2). Bueno does not disclose a **“biometric input independent of the identification card”**. Burger teaches of a handheld card reader 12 including a biometric input (i.e. fingerprint scanner 16) independent of the identification card 14, as shown in Figure 1 {also see Burger, column 5, lines 6-27}. Burger, suggests that combining an ID card reader and biometric characteristic of an individual is advantageous because an ID card by itself can easily be defeated by a hacker {see Burger, col. 3, lines 13-27}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include a biometric input independent of the identification card in the system of Bueno because, as taught by Burger, a hacker can easily defeat an ID card by itself.

Bueno in view of Burger do not disclose **“hash of the biometric data”** as claimed. Matyas, in the same field of endeavor (biometric security systems), teach of a one-way nonlinear hash function of biometric data samples {see Matyas, col. 5, lines 49-51+}. Matyas suggests that it is advantageous to use a hash function (i.e. in place of encryption) because hashing, as claimed, secures biometric data during transmission without unduly increasing the cost and complexity of the biometric application {see Matyas, col. 3, lines 1-3+}. Therefore, at the time of applicant's invention, it would have been obvious to one of ordinary skill in the art to hash the biometric data of Bueno in view of Cudlitz because, as taught by Matyas, a hash function secures biometric data

Art Unit: 2612

during transmission without unduly increasing the cost and complexity of the biometric application.

In claim 12, Bueno teaches that the remote identification tag identification system of claim 11, further comprising a system identification database in communication with said location processor, wherein said location process or further processes stored identification data {see Bueno, paragraph bridging cols. 2 and 3}.

In claim 14, although Bueno does not disclose "said location processor 3 determines identity from the identification data", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include said location processor 3 determining identity of the card user via the card number because, as taught by Bueno, it prevents fraud {see Bueno, col. 1, lines 54-60; col. 2, lines 32-37}.

In claims 15 and 16, Bueno teaches that the identification tag component of claim 1, wherein said identification data is authorization data {see Bueno, col. 2, lines 18-37}.

In claim 17, although Bueno do not disclose expressly "**a second location receiver and a second location processor, wherein said second location processor is in communication with said system identification database**", these claim limitations would have been just a matter of design choice to one of ordinary skill in the art and would have been obvious to add as many location receivers to the system of Bueno, depending on accuracy, dead spots, or how the signal in the system of Bueno will be picked up.

In claim 18, Bueno teaches that said identification tag interface is a smart card reader (memory interface) as shown in the drawings.

In claims 19 and 20, although Bueno does not disclose “the remote identification tag identification system of claim 11, further comprising an access barrier, wherein said location processor processes said received identification to determine access authorization and causes said access barrier to move when access is authorized”, the use of ID tags for access is conventional, as evidenced by Burger {see Burger col. 1, lines 16-18}, and would have been obvious in the system of Bueno. As such, Burger teaches using the remote identification tag identification system for access through an access barrier (i.e. door 44 or gate) as claimed {see Burger, Fig. 2; col. 6, lines 39-56+; col. 7, lines 46-50}. Burger suggests that it is advantageous to use the identification tag system in providing access through a door because due to the authentication process, it prevents unauthorized users gaining entry through the door {see Burger col. 8, lines 16-34}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include an access barrier with the location processor to determine access authorization in the system of Bueno because, as taught by Burger,

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,532,689 (Bueno), US 6,219,439 (Burger) and USP 6,507,912 (Matyas, Jr. et al), and further in view of USP 5,310,999 (Claus et al).

In claim 13, although Bueno do not disclose “**said location processor provides displayed identification data**”, these claim limitations are conventional, such as when used for toll collection as exemplified by Claus et al {see Claus et al, col. 5, lines 18+}, and would have been obvious in the system of Bueno to one of ordinary skill in the art at

Art Unit: 2612

the time of applicant's invention, because as taught by Claus et al, it provides for visual notification to motorists.

***Office Contact Information***

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William Bangachon whose telephone number is **(571)-272-3065**. The Examiner can normally be reached from Monday through Friday, 7:30 AM to 5:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy Garber can be reached on **(571)-272-7308**. The fax phone numbers for the organization where this application or proceeding is assigned is **571-273-8300** for regular and After Final formal communications. The Examiner's fax number is **(571)-273-3065** for informal communications.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Art Unit: 2612

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

William L Bangachon  
Examiner  
Art Unit 2635

January 24, 2007

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600